



512MB / 1GB (x64)
UNBUFFERED DDR SDRAM DIMM

DDR UNBUFFERED SDRAM DIMM

BL6464L
BL12864L

FEATURES

- 184-pin dual in-line memory module (DIMM)
- Fast data transfer rates: PC4000 or PC3200
- 512MB (64 Meg x 64), and 1GB (128 Meg x 64)
- Exclusively designed for high-performance systems
- Critical performance parameters tested for functionality
- Speed verification performed in-system
- $V_{DD} = V_{DDQ} = +2.8V \pm 0.2V$
- $V_{DDSPD} = +2.3V$ to $+3.6V$
- Commands entered on each positive CK edge
- DQS edge-aligned with data for READs; center-aligned with data for WRITEs
- Internal, pipelined double data rate (DDR) architecture; two data accesses per clock cycle
- Bidirectional data strobe (DQS) transmitted/received with data - i.e., source-synchronous data capture
- Differential clock inputs CK and CK#
- Four internal device banks for concurrent operation
- Programmable burst lengths: 2, 4, or 8
- Auto precharge option
- Auto Refresh and Self Refresh Modes
- 7.8125µs maximum average periodic refresh interval



- Serial Presence Detect (SPD) with EEPROM
- Gold-plated edge contacts
- Aluminum heat spreader
- Red and green LEDs showing memory activity
- Blue ground effects LEDs
- 1.25" (31.75mm) PCB Height

TIMING PARAMETERS

MODULE MARKING	MODULE BANDWIDTH	LATENCY (CL - tRCD - tRP - tRAS)
505	4.0 GB/s	2.5 - 4 - 4 - 8
503	4.0 GB/s	3 - 4 - 4 - 8

PART NUMBERS

PART NUMBER	MODULE DENSITY	MEMORY CLOCK/ DATA BIT RATE	BANKING CONFIGURATION	COMPONENT CONFIGURATION
BL6464L505	512MB	4.0ns/500 MT/s	Dual	32 Meg x 8
BL12864L503	1GB	4.0ns/500 MT/s	Dual	64 Meg x 8



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